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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/625,997

07/21/2003

Dale W. Petty

EH-10662R (02-391)

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04/25/2006

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EXAMINER

RODRIGUEZ, WILLIAM H

ART UNIT

PAPER NUMBER

3746

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/625,997

**Applicant(s)**

PETTY ET AL.

**Examiner**

William H. Rodriguez

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/27/04.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of Group I (claims 1-5) in the reply filed on 2/27/06 is acknowledged.

### *Abstract*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

**The abstract should** be in narrative form and generally limited to a single paragraph on a separate sheet **within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The current abstract contains less than 50 words and does not describe the invention sufficiently. Appropriate correction is required.

### *Specification*

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). **Correction of the following is required:** There is no proper antecedent basis for: "the environmental structure" and "the means for restricting" in the specification, see claims 2 and 3. What elements are called the environmental structure and the means for restricting (in the drawings and specification)?.

### *Claim Objections*

4. Claim 3 is objected to because of the following informalities:

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In claim 3 line 2, the recitation “said means” is presumed to be --said means for restricting-- for proper clarity. Appropriate correction is required.

***Drawings***

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **“the plurality of flap subassemblies axisymmetrically arranged about an engine centerline (claim 5)”** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 2 and 3, it is unclear from the disclosure what applicant calls the “the environmental structure” and “the means for restricting” in the specification, see claims 2 and 3. What elements are called or form the environmental structure and the means for restricting (in the drawings and specification)?. Appropriate correction is required.

Claim 3 recites the limitation "the divergent flap" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the throat" in line 9. There is insufficient antecedent basis for this limitation in the claim.

A prior art search has been attempted to the Examiner's best understanding of the invention. However, due to the deficiencies of the claims (claims 2-3) and the specification a full and complete application of the prior art to the claims was not possible. Lack of an art rejection with regards to claims 2 and 3 should not be construed as an indication of allowable subject matter. For the other claims 1, 4 and 5, see detail rejections below.

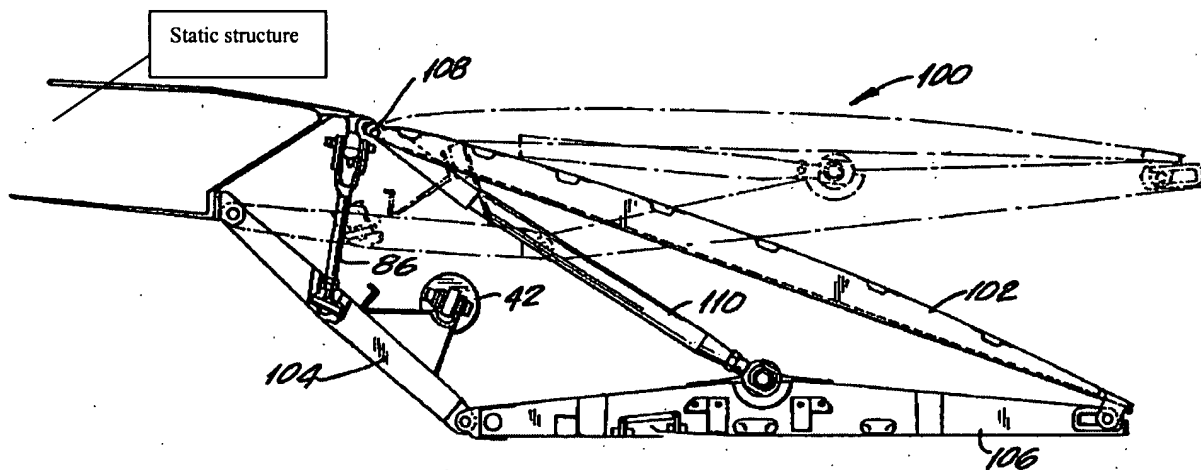
***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Nash (US 5,176,323).



**FIG. 7**

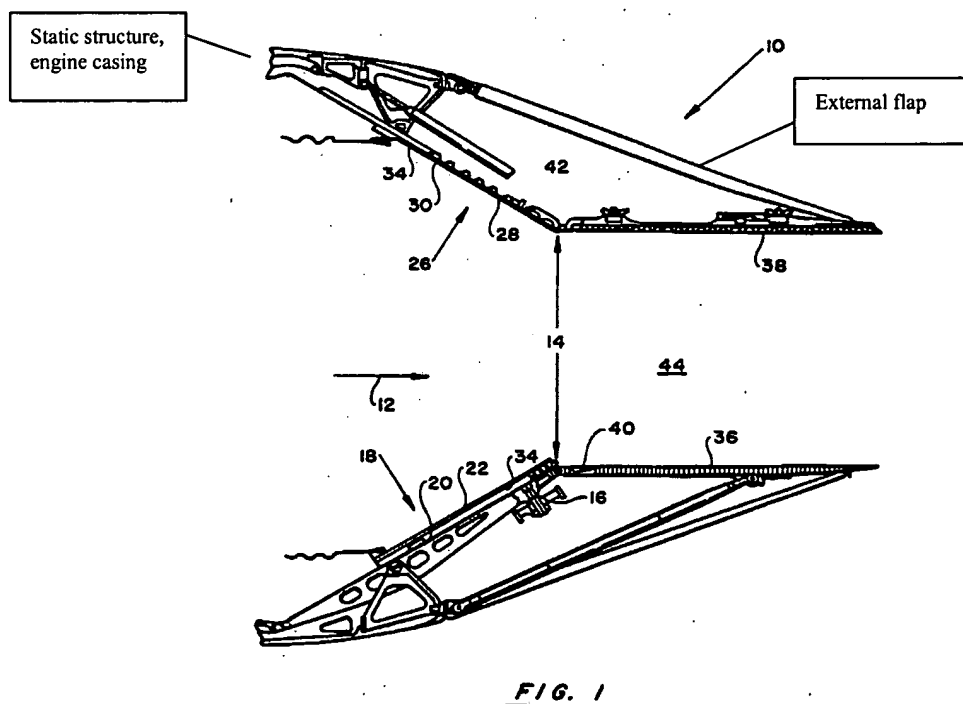
Nash teaches a turbine engine nozzle comprising: a static structure; a plurality of flap subassemblies arranged about an engine centerline comprising: an upstream flap 104; a downstream flap 106 pivotally coupled to the upstream flap for relative rotation about a hinge axis; an external flap 102 and an actuator linkage 110 couple to the downstream flap along a forward half thereof for actuating the upstream and downstream flaps so that the throat area is varied within a range of areas (min. and max. areas). See particularly cl. 5 ll. 28-30 and Figure 7.

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10. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by **Tseng et al.** (US 6,240,720).

**Tseng** teaches a turbine engine nozzle comprising: a static structure 22; a plurality of flap subassemblies arranged about an engine centerline comprising: an upstream flap 32; a downstream flap 34 pivotally coupled to the upstream flap for relative rotation about a hinge axis; an external flap 33 and an actuator linkage 36 couple to the downstream flap along a forward half thereof for actuating the upstream and downstream flaps so that the throat area is varied within a range of areas (min. and max. areas). See particularly cl. 3 ll. 64-67 and Figure 2.

11. Claims 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by **Barcza** (US 5,111,992).



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**Barcza** teaches a turbine engine nozzle comprising: a static structure; a plurality of flap subassemblies arranged about an engine centerline comprising: an upstream flap 20; a downstream flap 36 pivotally coupled to the upstream flap for relative rotation about a hinge axis; an external flap and an actuator 16 for actuating the upstream and downstream flaps so that the throat area is varied within a range of areas (min., max. and intermediate areas). See particularly cl. 1 ll. 44-50; cl. 2 ll. 24-26 and Figure 1.

12. Claims 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by **Johnson (US 6,398,129)**.

**Johnson** teaches a turbine engine nozzle comprising: a static structure 41; a plurality of flap subassemblies arranged about an engine centerline comprising: an upstream flap 12; a downstream flap 14 pivotally coupled to the upstream flap for relative rotation about a hinge axis; an external flap 28 and an actuator 23 for actuating the upstream and downstream flaps so that the throat area is varied within a range of areas (min., max. and intermediate areas). See particularly cl. 2 ll. 11-12, 26-28 and Figure 1

### ***Contact information***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William H. Rodriguez 4/17/06  
Primary Examiner  
Art Unit 3746